

BRITISH HONDURAS

ANNUAL REPORT OF THE
DEPARTMENT OF AGRICULTURE
FOR THE YEAR ENDING
31 DECEMBER 1935



ADDRESSES OF OFFICERS.

Agricultural Officer, Belize Box 149, Belize.
Asst. Agricultural Officer, Stann Creek ... Agric. Station, Stann Creek
Asst. Agricultural Officer, Corozal Agric. Station, Corozal.
Agricultural Inst., Punta Gorda Rice Exp. Station, Punta Gorda

STAFF LIST.

Agricultural Officer H. P. Smart, B.Sc. Agr. (S.Af.)
A.I.C.T.A.
Asst. Agricultural Officers R. A. Kitching, Dip. Agr. (Edin).
H. L. Manning, Dip. Agr. (I.C.T.A.)
Agricultural Instructor D. D. Haynes
Foreman, Agric. Station, Stann Creek E. W. Francis.
Foreman, Agric. Station, Corozal F. F. Orio (on probation)
Temporary Local Assts., Rice Exp. Station E. C. Wiltshire
E. L. Reneau
M. Powell

CLERICAL STAFF.

W. A. Grant Chief Clerk, Head Office, Belize
Geo. McKesey Clerk, Agricultural Sta., Stann Creek.
Miss S. I. Jex Typist, Head Office, Belize
Win. A. Grant Messenger, Head Office, Belize

STAFF MOVEMENTS.

H. P. Smart, Agricultural Officer returned from oversea's leave and resumed duty on the 24th May.
H. L. Manning, Assistant Agricultural Officer, arrived in the Colony on November 29th from Montserrat.
E. C. Wiltshire, appointment as Temporary Local Assistant, Rice Station terminated on the 28th February.
E. L. Reneau, appointed Temporary Local Assistant, Rice Station on the 1st March. Appointment terminated on the 30th April.
M. Powell, appointed Temporary Local Assistant, Rice Station on the 1st June. Appointment terminated on the 12th November.

CONTENTS.

Staff List	2
------------------	---

Report of Agricultural Officer

Section I. Agriculture in General	2-13
Section II. Work of Department of Agriculture	14, 15
Section III. Finance	15, 16
Section IV. Legislation	16

Reports of District Agricultural Officers

Section V.A. Stann Creek	17-24
Section V.B. Punta Gorda	24-31

APPENDIX A.

Ginger. Report from the Imperial Institute	31-33
--	-------

APPENDIX B.

Rainfall of the Colony, 1935	34
------------------------------------	----

SECTION I.

AGRICULTURE IN GENERAL.

Weather Conditions.

1. The past year was by no means favourable for crop production because of the severe and prolonged dry season which was experienced over the whole Colony. The annual crops, e.g. corn (maize), rice and field peas suffered the most, and many fields were re-seeded three times before growth was established. Crops were therefore much later than in normal years. Added to the difficulties of the dry weather was the exceptionally heavy rainfall during October. This did considerable damage to crops, particularly to rice in the Belize River and Sibun areas. High winds were experienced during the last week end in October which caused some damage to bananas in the Punta Gorda district.

Details of Temperature and Rainfall recorded at the Agricultural Stations, Stann Creek and Punta Gorda are set out in Section V. in the reports of the respective stations.

GENERAL SITUATION.

2. Steady advances were made in establishing Agriculture as an economic factor in the welfare of the Colony. When considering agriculture in British Honduras it is necessary to bear in mind that it is even now only of very secondary importance and is still an infant industry. Agriculture has been carried on for many decades in the Colony, but to little practical purpose until about ten years ago. Previous to that only three crops demanded any real attention, viz. coconuts, bananas and sugar cane. Those engaged in their production made up a comparatively small proportion of the total population of the Colony. At the beginning of the present century the production of sugar received a severe set back due to a number of factors, one of which was the European production of cheap beet sugar, and since then sugar cane farming has gradually declined in importance. Banana growing received a severe check about 1918 through the ravages of Panama disease and up to now production of fruit has not returned to the pre-1918 figure. Coconut production on the other hand has remained fairly constant but the depressed condition of the markets during the past few years has had its effect on the exports from this Colony. During this ten year period a definite, and it is thought permanent, interest has been shown in agriculture and various branches are now on a comparatively firm footing. The increase in the production of citrus fruit and its by-products is the main feature of interest. This industry is now being conducted on thoroughly up-to-date lines and can be considered to have passed the experimental stage. In addition to citrus, the production of certain foodstuffs for home consumption has increased and the quality improved considerably. The response to the Board of Agriculture scheme for the purchase of produce has been most gratifying in spite of the adverse weather conditions. Nevertheless, there is much room for improvement in the methods of cultivation and until planters generally adopt tools and equipment other than the machete they must be content with their present lot. Further, little head way will be made while the present type of 'milpa' cultivation (shifting cultivation) is practised. That this persists is almost entirely due to the old method of leasing large areas thus encouraging extensive rather than intensive planting, to ignorance of proper methods of cultivation and unwillingness to alter long established customs.

3. Table II. indicates the proportional trend of exports of all classes, their value for the past six years, and the average for ten years. The absence, except in the case of rice, of data relating to production of crops consumed locally is unfortunate as no indication can be given of the increase that is taking place in this most important branch of local agriculture. It is feared that some time must elapse before the collection of such data is possible.

CONDITION OF CHIEF AGRICULTURAL CROPS.

4. As has already been noted the year was an adverse one for all crops owing to the extremely dry conditions during the first six months of the year. While the field crops suffered considerably, permanent and semi-permanent crops were also affected resulting in reduced production. The necessity for greater use of tillage, mulching and growing of cover crops was clearly brought out and it is now evident that more interest is being exhibited in their use. In the case of citrus, and some other crops, the benefits to be derived from the practice of mulching with vegetable matter and the growing of cover crops are clearly demonstrated at the Agricultural Station in Stann Creek and it would be well if planters visited the Station to discuss the matter and see for themselves the methods adopted.

TABLE I.
RAINFALL (INCHES).

STATION	JANUARY TO JUNE		JULY TO DECEMBER		OCTOBER		JUNE	
	1935	Deviation from Mean	1935	Deviation from Mean	1935	Deviation from Mean	1935	Deviation from Mean
Corozal Town	5.21	-15.93	41.83	+ 9.25	17.02	+9.49	—	—
Orange Walk Town	7.50	-14.52	43.68	+ 8.44	14.25	+6.22	—	—
El Cayo Town	12.34	-12.36	41.13	- 1.44	12.90	+4.80	—	—
Belize Town	13.44	-15.15	52.47	- 3.96	24.27	+7.30	—	—
Stann Creek Town	9.53	-16.96	47.47	- 8.33	21.36	+8.62	—	—
Stann Creek Agricultural Station	10.33	-23.90	59.49	- 1.49	22.01	+8.82	—	—
Stann Creek Middlesex	26.20	-19.98	82.81	- 8.56	23.96	+6.69	—	—
Punta Gorda Town	52.00	- 7.72	94.64	-19.31	19.63	+5.28	34.75	+9.30

TABLE II.
EXPORTS OF DOMESTIC PRODUCE BY CLASSES. VALUE AND PERCENTAGE BY VALUE OF ALL PRODUCE.

YEAR	Forest Produce		Agricultural Produce		Marine Produce		Unclassified		Total Value \$
	Value \$	%	Value	%	Value	%	Value	%	
1930	1,194,085	85.09	202,215	14.40	6,748	.48	500	.03	1,403,546
1931	483,477	79.62	117,579	19.36	6,036	.99	200	.03	607,292
1932	222,447	69.53	90,071	28.15	7,407	2.32	—	—	319,925
1933	304,157	70.86	120,074	27.97	4,991	1.17	—	—	429,122
1934	652,000	74.54	212,763	24.40	9,195	1.06	—	—	873,958
1935	648,848	70.17	268,285	29.01	7,583	.82	—	—	924,726
Average 1926-35	1,064,289	83.00	205,064	16.00	13,617	1.00	193	—	—

5. **BANANAS**—Due to the drought quality and quantity were affected and planters therefore suffered, in some cases considerably. The tendency to rush fruit to market before sufficiently mature and to give insufficient care to handling continues, especially in the Southern district. The desire for quick money can be overdone which many planters have now learnt to their cost. The bulk of the activity in the planting of this crop continued to be confined to the Punta Gorda district and the Stann Creek Valley. There was, however, considerable interest in banana planting on the Belize River mainly above Little Falls. In this area some fair second class banana land is to be found on which moderately good results may be expected but planters in this area must realize the necessity of thorough drainage and the use of sound planting material if they are to be successful. Transportation, as in the case of most other banana growing areas in the Colony, is a big difficulty here, although possibly less acute than on such rivers as the Rio Grande and Monkey River.

6. As noted above, in the Punta Gorda district interest still runs high, but regrettably, with little consideration for the type of land used. It cannot be too strongly stressed that the careful selection of land for this crop is of the utmost importance, and such factors as soil acidity, natural drainage and depth of soil, to mention only a few, must be borne in mind. Drainage is of especial importance in this district with its high rainfall. Many banana fields may be seen to be suffering from excessive moisture in the soil indicated by unthrifty growth and wilting of the plants.

7. In addition to these areas there has been an increase in the planting of bananas on lands served by the road now being built from Belize to Orange Walk. Plantings are, however, confined to the neighbourhood of Boston and the Santanna Reserve. In the Salt Creek estate the settlers have extended their fields and in spite of many adverse factors optimism prevails. Generally speaking this part of the country may be considered not entirely suitable for banana growing because of shallow soils and somewhat inadequate rainfall. The economic life of a plantation is likely to be short under such conditions although the quality and quantity of fruit for the first and second crops may be good.

8. There has been an increase in the shipments of "Lacatan" bananas and a few of the Cavandish type have been disposed of. These have all been handled by the schooners and marketed mainly in Florida, U.S.A. The production of these types is confined to the Stann Creek Valley.

TABLE III.
EXPORTS OF BANANAS. (Bunches).

	1931	1932	1933	1934	1935
Number	87,036	78,867	141,662	293,293	356,056
Value \$	31,039	26,970	48,239	93,721	125,274

9. **COCONUT AND COPRA**—The export of Coconuts showed a slight increase over that of 1934 and represents the largest export in any one year for at least the last twelve years. Prices also showed an advance, partly attributed to a greater competition amongst local buyers, and are the highest paid since 1929 when an approximate average value of \$20.31 per 1,000 nuts was paid. This increased export, however, is offset by the huge decrease in shipments of copra during the past two years. During the year Mexico was the only buyer. Previously the U.S.A was the largest buyer. In spite of depressed markets interest in the production of coconuts has increased and growers generally are paying more attention to their plantations.

10. **CITRUS**—This industry showed general improvement and is becoming of increasing importance. Grapefruit and oranges formed the bulk of the shipments and the high quality of the Colony's fruit was maintained. There was greater activity in canning but prices were low. In spite of adverse climatic conditions the citrus crop showed an increase but the bulk of the crop set during the year will not be fit to ship until the second quarter of 1936. An estimate for the total crop (1935-36) is 20,000 cases of fresh fruit plus the equivalent of 10,000 cases to be shipped either as canned or juice fruit. Grapefruit makes up the bulk of this estimate of production.

Small scale shipments of Genoa and Villa Franca Lemons and King Mandarins grown on the Agricultural Station, Stann Creek, were made during the year. The reports were very favorable and as the fruit was picked from trees in their first year of bearing it is felt that it is worth while persevering with these fruits for export specially the lemons.

TABLE IV.
EXPORTS OF COCONUTS AND COPRA.

					1931	1932	1933	1934	1935
No.	..	..	..	..	..	..	..	..	..
					3,933,613	2,974,220	3,610,450	5,232,861	6,589,320
Value	..	..	..	..	..	..	..	..	..
					\$41,913	\$24,860	\$32,367	\$64,855	\$96,515
Approximately average value per 1,000	..	..	..	..	..	..	..	..	..
					\$10.65	\$8.35	\$8.96	\$12.39	\$14.64
COPRA.									
Lbs.	..	..	..	..	..	..	..	..	..
					913,254	995,704	818,233	332,883	5,230
Value	..	..	..	..	..	..	..	..	..
					\$21,338	\$14,700	\$11,742	\$5,010	\$52
Approximately average value per cwt.	..	..	..	..	..	..	..	..	..
					\$2.62	\$1.65	\$1.61	\$1.68	\$1.11

TABLE V.
EXPORTS OF CITRUS FRUITS AND CANNED AND JUICED FRUIT.

ARTICLE	1933		1934		1935	
	Quantity Cases	Value \$	Quantity Cwt.	Value \$	Quantity Cwt.	Value \$
Grapefruit	5,094	13,462	13,400	33,569	15,450	32,280
Oranges	420	967	2,143	1,896	1,595	1,720
Tangerines	62	154	197	478	117	219
Grapefruit, Canned	—	—	lbs. 15,904	1,180	lbs. 39,104	1,999
Grapefruit Juic	—	—	gals. 1,430	500	lbs. 4,706	156

11. The industry in the North of the Colony shows signs of expansion and more planters are taking an interest in planting of citrus fruits. Exports from this area although small are increasing. All the fruit is now marketed through the British Honduras Citrus Association and receive the same treatment as the Stann Creek fruit. Packing facilities are still somewhat primitive but the packing and grading are well done. The inspection of fruit for export is serving a useful purpose and planters are more frequently calling on the Department to advise as to the maturity of their fruit before picking. This alone is saving considerable rejection at the shed and financial loss to the growers.

12. The demand for information on the fertilizing of orchards is on the increase. With the object of determining as accurately as possible the fertilizer and cultural requirements of grapefruit in the Stann Creek Valley a small but complete experiment has been laid down on the Agricultural Station. The scheme was submitted to the Chemistry Department of the Imperial College of Tropical Agriculture, the Head of which has first hand knowledge of conditions, particularly of the soils. Results of any value will not be available, of course, for some years to come.

13. Exports for the last three years are shown in Table V.

14. RICE—This crop suffered almost more than any other by the drought and production, as gauged by purchases by the two rice mills, was considerably lower than in 1934. The reduction in rice growing in the Punta Gorda area was also attributable to the activity in bananas. This is most regrettable in view of the erection by Government during the year of a rice mill in Punta Gorda. The production of rice is looked upon very often as only a catch crop and only such quantities as will fill the immediate requirements for feeding the family are considered worth while. With the low yields at present obtained, due very largely to the primitive methods of cultivation used, the attractions offered by this crop are not of a high order, except to serious planters. It has been shown at the Rice Station that yields can be increased appreciably by only a slight modification of the existing practices but it is difficult to convince the planters that by adopting these they themselves can improve their yields. It is hoped that within a short time the Department will be able still further to add to the yields by the distribution of improved seed.

15. The new mill erected in Punta Gorda, manufactured by Messrs. Lewis Grant, Scotland, is of the semi-detached type with two pearling cones. It has a capacity of 600 pounds of milled rice per hour. Attached to the mill is a grain dryer for processing padi, corn and pulses, and two grain storage bins.

16. The following table indicates the production of Padi by areas during the last three years based on purchases by the Rice Mills.

TABLE VI.
PADI PRODUCTION BY AREAS.

AREA	1933 (lbs.)	1934 (lbs.)	1935 (lbs.)
<i>Belize River</i> —below Big Falls including			
Black and Spanish Creeks	95,500	137,572	73,754
<i>Belize River</i> —above Big Falls	518	11,019	19,614
Sibun River	5,785	4,272	13,333
Manatee	2,912	4,669	5,506
Stann Creek	1,531	—	—
Northern River	945	—	593
Corozal District	1,366	—	555
Orange Walk District	10,129	3,118	2,690
Monkey River	—	34,944	9,053
Punta Gorda	—	91,818	48,088
Rio Grande	58,160	4,438	6,672
Temash, Moho and Sarstoon Rivers	—	4,388	11,132
New Haven	—	—	656
Total	176,846	296,238	193,218

17. Due to its lateness there was no milling of the 1935 crop during the year but all the padi purchased at the Belize Mill was cleaned and passed through the dryer. The quality of the padi offered for sale to the Mills showed much improvement over that of previous years being better threshed and cleaned. A shipment of 200 bags of imported rice received in a weevilly condition was cleaned at the Belize Mill for the importer with satisfactory results.

18. **CORN (MAIZE)**—This crop also suffered considerably by the dry weather. Much alarm was caused by reports of wholesale destruction in the North but on investigation these proved to be greatly exaggerated. Nevertheless the total crop was much less than in previous years, but the shortage is not as acute as at first expected. Supplies for animal consumption during the first half of 1936 will be short, and it is expected that a considerable quantity of corn will be imported. Purchases by the Board of Agriculture amounted to approximately 467 cwts. The stimulus given to production by the Government produce purchase scheme is more noticeable in this crop than any other. In view of this it is anticipated that the Colony will shortly cease to be dependant on outside sources for supplies in years of heavy demand. Storage of this grain for any length of time is very difficult but every endeavour is being made to solve the problem in respect of bulk storage.

19. **PULSES**—The commonest pulse crops grown are Red Kidney Beans, Black Eye Peas (Cowpeas) and Black Beans. These form saleable articles while other lesser known pulses are grown for consumption on the plantations. Encouragement is being given to planters to increase their production of these crops particularly that of Red Kidney Beans and all three are accepted by the Board of Agriculture. Importations of Beans and Peas to the value of \$10,000 are made every year. Owing to the fact that they form one of the chief articles of diet of almost the whole population of the Colony and the fact that they can be grown easily it is surprising that these crops should have been so neglected in the past.

20. **CASSAVA**—The hoped for Cassava Products factory for the Stann Creek Valley did not materialize with the result that little attention was paid to this crop apart from production for food purposes. A small experimental cassava factory was installed at the Agricultural Station in Stann Creek and trials in the manufacture of starch were begun. Samples of the starch are to be sent overseas for examination in the near future. In the meantime, a small trade in Belize is being worked up. So far only cassava grown on the Agricultural Station is being used but if the manufactured article proves up to the high standard demanded by overseas markets it is proposed to enlarge the plant so that a part of the planters' root production may be handled and a small export trade attempted.

21. **TOBACCO**—Although this crop is produced only on a limited scale a greater interest was shown in it during the year and more planters are growing it. There is a good local demand for a type of leaf that can be mixed with imported Virginia leaf for the manufacture of cigarettes. Prices offered, however, are low in comparison with the landed cost of the imported leaf. In spite of this it is considered to be a crop with possibilities in certain sections of the Colony and the Department will during 1936 make a start with trials on the Corozal Agricultural Station. The newly appointed Assistant Agricultural Officer for the Northern Districts visited Puerto Rico on his way to the Colony for the purpose of studying the tobacco industry in that island. His experience will assist greatly in the development of this crop.

LIVESTOCK.

22. The Livestock industry continues to occupy the attention of only a few and is centered mainly in the western portion of the Colony. Beef production for local consumption is the chief interest but there has been a return on a small scale to the use of animals for mahogany haulage. The use of steers and mules for ploughing and cultivating and for the supply of manure has not attracted the attention of many. The reason for this is possibly due to the high capital expenditure involved in the purchase of draught animals and implements. It is surprising, however, that those who already possess animals and who can afford to buy the few essential implements have not adopted implement cultivation. The Department of Agriculture uses animals for farm operations on the Experiment Farms and is endeavouring to foster an interest in their general use.

23. The beef consumed in the Colony is now almost entirely of local origin. The quality on the whole is poor and an improvement is most desirable. In the case of Belize difficulty is experienced in improving quality because the town is so far removed from grazing areas which does not permit of the proper resting and re-conditioning of the animals before slaughter.

24. Pork is entirely of local origin and the Punta Gorda district continues to be the major source of supply. The Department of Agriculture imported two Duroc-Jersey boars early in the year. One was stationed at the Stann Creek Experimental Farm and the other at the Rice Farm, Punta Gorda. Unfortunately the Stann Creek animal died soon after its arrival in the Colony. Pig raisers were offered the free service of their sows by the Pun-

ta Gorda boar. Only two breeders took advantage of this during the year and this in spite of much agitating for government provision of breeding animals.

25. The keeping of poultry continues to be most popular but the supply of eggs is still very much below consumption requirements and with no guarantee of freshness. Table birds, while fairly plentiful, are of extremely poor quality and in comparison very expensive.

26. **CURING PORK**—While on leave in England the Agricultural Officer investigated the methods of curing pork with the object of using the locally raised hog for the manufacture of pickled pork thus creating a local industry and reducing imports. With the assistance of members of the Cold Temperature Research Station, Cambridge, much useful information was gathered. A special report on the investigations was submitted to Government.

PESTS AND DISEASES.

27. **CITRUS**—No serious pests or diseases are reported from the citrus areas. Rust mite and Scale insects are still present in most orchards in the Stann Creek Valley and have caused some damage, possibly more than in past years on account of the severe dry season. Spraying with Arbolina oil spray has proved very efficient for the control of Scale, and dusting with Sulphur for that of Rust Mite. Melanose, has also been prevalent particularly in certain orchards and Citrus Scab in nurseries. Where used Burgundy mixture has proved entirely satisfactory in the control of these two diseases. In the Corozal area Scale insects appear to be the major pest. There has been it is gratifying to record, a definite increase in the practice of spraying and dusting and there seems every reason to believe that spraying and dusting will be more generally adopted in future. Planters are beginning to realize that carefully planned and regular spraying at least improves the appearance of their fruit resulting in enhanced prices. Pink disease (*Corticium salmonicolor*) is still present on one estate at least but by regular and careful treatment it remains under control.

28. **BANANAS**—Panama disease continues to be a serious limiting factor in the advancement of this crop. Under conditions prevailing in the Colony the control of the spread of this disease is extremely difficult, in fact almost impossible. The incidence of Panama disease is on the increase in the Sarstoon, Temash and Moho areas but its spread is not as rapid as has been experienced in other parts. In the Stann Creek Valley and Monkey River areas it continues to cause serious losses. At the Agricultural Stations in Stann Creek and Punta Gorda a stock of oil for destroying diseased stools is kept for distribution at cost price, but free distributions have been made.

29. **GENERAL**—Localized damage was sustained by the rice crop in the vicinity of Flowers Lime Walk, Belize River, due to the ravages of a *Pentatomid* insect. The reason for this outbreak is not fully understood nor the reason why it was limited to a comparatively small area. It is thought to have been due to two main factors, the drought and secondly that severe bush fires experienced in the neighbourhood earlier in the year destroyed the natural host plants of the insect.

30. Ants, especially the Wee Wee (*Atta spp.*), continue to be a source of worry. The control of the Wee-Wee ant in particular necessitates the combined action of communities and it is regrettable to state that such co-operation is difficult to obtain. To cheapen the cost of control the Department of Agriculture is permitted to carry bulk stocks of the more usual poisons, e.g. Cyanogas, Cymag and Carbon bisulphide, at its Experiment Stations for sale at a figure slightly over cost price. This service has been well patronized in the Stann Creek Valley.

31. Insecticides and Fungicides are difficult to purchase in the Colony and for this reason, the small planter finds it hard to effect control measures. The demand in the past has been small and therefore tradesmen have been deterred from carrying stocks. Some proprietary mixtures are stocked but for the most part they are limited in their value. The demand for some of the basic ingredients of the standard insecticides and fungicides e.g. Lead Arsenate, Paris Green, Copper sulphate, is on the increase and it would be a help if the more common ingredients were stocked and sold at reasonable prices. At present the prices asked are beyond the reach of most farmers.

SPECIAL FEATURES.

32. The Board of Agriculture, with His Excellency the Governor as Chairman, was created early in the year and superceded the Agricultural Advisory Committee which had been in existence for some years.

33. The personnel of the Board was as follows:

H. E., The Governor—Chairman.

H. H. the Chief Justice—Vice-Chairman.

The Honourable Colonial Secretary.

The Agricultural Officer.

The Honourable F. W. Ross.

R. H. Eyles, Esq.

E. J. Hofius, Esq.

H. A. Gabb, Esq., (nominated by the British Honduras Agricultural Society).

34. The Board's main duty lay in the direction of inaugurating a produce purchasing scheme. It had been felt for some time that an outlet should be provided for non-perishable farm products e.g. corn and pulses (beans), to supplement the existing but uncertain market. The Board decided to offer minimum prices to planters so as not to be in direct competition with the already established avenues of sale. Buying depots were opened in Belize and Punta Gorda, both working in conjunction with the rice mills in the two towns. In spite of the poor crops the scheme was well patronized and it is felt that it has created a sense of security in the planting community and has been an encouragement to greater and steadier production.

35. RICE MILL AND DRYING KILNS—During the year the Belize grain drying kiln and Punta Gorda rice mill and drying kiln were erected and put into operation. Towards the end of the year a fair quantity of padi and corn was passed through the Belize drier with satisfactory results. One difficulty was experienced, viz. the checking of moisture contents. The existing laboratory facilities and lack of a trained laboratory assistant place a heavy load on the Agricultural Officer. It is essential that regular and fairly accurate tests be made so as to prevent over or under drying.

36. DROUGHT—As noted under the paragraph dealing with weather conditions an abnormally severe and prolonged dry season was experienced. The dry season usually lasts from February to the middle of May. This year, however, it covered approximately the period January to latter part of July. A few showers fell during this time but were followed by very hot dry spells which were extremely harmful to germinating seed. Crop failures took place in the North, Central and Western portions of the Colony. The experience of this drought may bring home to planters the fact that planting dates adopted through custom are not always satisfactory and that in most cases the best planting period for summer crops is not until the rains have made a definite start. The July sowings—one and a half to two months later than the usual time for sowing—although late in most cases produced fair crops. In the case of rice, however, the late sowings were seriously affected by the abnormal October rains and a considerable quantity of rice was destroyed especially on the Belize River plantations. After reseeding two or three times the majority of planters found themselves very short of seed. In order to prevent any undue shortage of foodstuffs later in the year Government decided to make issues of free seed to planters in the affected areas. In this matter the British Honduras Agricultural Society assisted greatly by donating \$100 towards the cost of the seed. The distribution was carried out by the Agricultural Department with the assistance of the District Commissioner, Cayo, and several private helpers. It was found necessary to issue seed only in the Belize and Cayo districts.

37. The following seeds and planting material were issued to about 650 planters:

Corn, 1,690 lbs.

Padi, 4,004 lbs.

Black Beans, 129 lbs.

Black Eye Peas, 368 lbs.

Cassava, 1,000 sticks (approx.).

Sweet Potato, 1,000 slips.

38. CROWN LANDS—During the year the method of disposal of Crown Lands for agricultural purposes was modified. Heretofore leasing and conditional purchase of crown lands were in force. Under the new system the leasing of lands is abolished. Lands will now only be disposed of by way of Crown Grants, preceeded by Location Tickets, except where reservations have been or will be created. The planter is required to perform and observe certain conditions mainly concerned with the method of development and payment of the purchase price of the land at regular intervals. He is allowed five years in which to pay or he may purchase outright. The value of the land is determined on its situation and quality. By this system it is felt that better use will be made of Crown lands

than in the past and that a more settled and hard working agricultural community will be developed.

39. Three agricultural reservations were created in different parts of the Colony in which persons may on payment of an occupancy fee of \$1.00 per year occupy land. This is to provide land for those not wishing to take up permanent holdings under the Crown Grants system but does not preclude them from purchasing at a later date the area they occupy within the reserve.

40. SUGAR FACTORY, COROZAL—After much delay the erection of the Sugar Factory for the Corozal district was started towards the end of the year. The capacity of the factory is approximately 2,000 tons of sugar per crop season which is roughly equivalent to the annual importations of sugar into the Colony. It is expected this factory will help considerably in improving conditions in the Corozal district and when working to full capacity the Colony will be independent of outside sources of supply..

1935
AGRICULTURAL PRODUCE.
EXPORTS.

Product	Destination	Quantity	Value \$	% by value of All Agricultural Produce 1935.	% by value of All Products 1935.
Coconuts (No.) ..	Canada	6,589.320	96,515		
	U.S.A. Holland				
	Total	6,589.320	96,515	35.97	10.44
Copra (lbs.)	U.S.A. Mexico	5,230	52		
	Total	5,230	52	0.02	0.01
Bananas (Bchs.) ..	U.S.A.	356,056	125,274	46.69	13.35
Plantains (No.) ..	U.S.A.	142,860 19,700	909 98		
	Honduras				
	Total	162,560	1,007	0.38	0.11
Rum (Gallons) ..	Cayman Island	7,983 134	8,879 184		
	Guatemala				
	Total	8,117	9,063	3.38	0.98
Grapefruit (cwt) ..	U.K.	10,389	21,666		
	Canada	4,528	9,508		
	Bermuda	533	1,106		
	Total	15,450	32,280	12.03	3.49
Oranges (Cwt) ..	U.K.	123	228		
	Canada	558	1,039		
	Bermuda	64	120		
	Honduras	850	333		
	Total	1,595	1,720	0.64	0.18
Tangerines (Cwt) ..	Canada	109	204		
	Bermuda	8	15		
	Total	117	219	0.08	0.02
Grapefruit Canned (lbs.)	Canada	39,104	1,999	0.75	0.21
Grapefruit Juice ..	U.K.	4,706	156	0.06	0.02
Total	Forest Produce		648,848		70.17%
Total	Agricultural Produce		268,285		29.01%
Total	Marine Produce		7,583		0.82%
					100.00%

SECTION II.

DEPARTMENT OF AGRICULTURE.

41. **GENERAL**—The Staff of the Department was augmented in October by the appointment of Mr. H. L. Manning of the Montserrat Department of Agriculture as Assistant Agricultural Officer for the Northern districts with headquarters at the Corozal Agricultural Station. Mr. Manning travelled to this Colony via the island of Puerto Rico where he spent six weeks studying the tobacco industry of that island.

42. In addition to his general duties of District Agricultural Officer for Stann Creek, which include the management of the Agricultural Station, Mr. R. A. Kitching acted as Agricultural Officer up to the end of May. As Fruit Inspector for the Stann Creek area he spent a considerable amount of time on fruit inspection work and examination of fruit in orchards. Further he carried out a special tour of inspection in the North of the Colony in connection with damage to crops by the drought, as well as attending to the trials of the Punta Gorda Rice mill.

43. The Agricultural Instructor, Mr. D. D. Haynes, who is in charge of the Rice Experiment Station, Punta Gorda, and general field work of the whole district, was placed in charge of the Rice Mill and Board of Agriculture buying depot in Punta Gorda. He made a number of tours in his district, each of short duration. Difficulty is experienced by him in touring as up to now it has not been found possible to select a suitable person for the post of Temporary Local Assistant with the result that when he is away from the Rice Station there is no responsible officer to leave in charge.

44. The organization of the produce buying scheme inaugurated by the Board of Agriculture occupied much of the time of the Agricultural Officer in Belize and involved the inspection of the produce and the supervision of its drying and storing. The organization of the distribution of seeds and planting material to planters in the areas affected by the drought was a duty of the Agricultural Officer who also supervised personally most of the actual distribution. He was able to make only one tour, besides routine Departmental visits to Stations and land inspections, when he visited the area round Bamboo Patch and Flowers Lime Walk to examine the rice industry.

45. The Department assisted the British Honduras Agricultural Society in submitting samples of Ginger to the Imperial Institute for examination. The Report received from the Institute is included as an appendix to this report.

46. Inspection of importations of plant material and certain plant material for export was carried out rigidly during the year. In two cases material was confiscated and destroyed for contravention of the regulations governing the importation of planting material.

47. The following articles were written for the British Honduras Agricultural Society Journal by members of the Staff:

“Drainage” by R. A. Kitching.

“The Government Rice Mills and Drying Kilns” by R. A. Kitching.

“Rice in the Carribean Area” by D. D. Haynes.

“Corn—Its uses and cultivation” by D. D. Haynes.

“The Rice Experiment and Demonstration Station, Toledo—Its Aims and Objects” by D. D. Haynes.

48. **COROZAL AGRICULTURAL STATION**—An Agricultural Station to serve the Northern Districts was opened early in the year. The area of the Station is 100 acres of which about 45 acres were cleared during the year. The establishment of this Station was made possible by a free grant of £1,900 from the Colonial Development Fund. During the year catch crops of corn, broom-corn and pulses were grown and a small citrus variety plot laid out and planted. Sugar cane varieties, fodder grasses, and cotton were planted and trials with onions, tobacco and potatoes started. The main work on the Station consisted of establishment work, such as erection of buildings, road and drain construction, fencing and cleaning out old wells for the water system. From the beginning of 1936 the more serious work of the Station will begin.

49. **PINE RIDGE RUSH POND, RICE PLOT**—In order to investigate the possibilities of rice growing in the rush ponds which occur in various sizes scattered all over the Pine Ridges to the west of Belize, the Department undertook to bring a small pond under cultivation. A pond of about 1 acre in extent was selected and divided into eight plots with drains surrounding the plots connected to a main outlet drain to carry away surplus water. Four plots were dug with a spade and seed broadcast on them, two were clean weeded and dibbled in the local style, one was hoed to a depth of about 4 inches and seed dibbled in and the eighth plot was reserved for the planting of ground provisions and pulses. Both local and British Guiana types of rice seed were sown. The experiment was a failure owing to the exceedingly severe weather conditions and also it is thought to the rawness of the soil. Observations made during the year indicate that if these ponds can be thoroughly drained to prevent water accumulating in them at any time, and if they are ploughed up so as to incorporate the accumulation of vegetable matter, and allowed to lie fallow for a period to enable the soil to become thoroughly aerated and broken down, then good crops of rice may be possible. A winter crop of transplanted rice was attempted but again because of exceptionally dry and hot weather little is expected. It is yet too early to give a definite opinion on this crop.

50. Others have tried growing rice in the rush ponds with some degree of success. It should be pointed out here that in all cases these trials have been made on the edges of the ponds and not actually in the ponds. The soil on the edges of these ponds is quite different from that in the ponds but limited in area. To use the edges only would be uneconomical and therefore the reason for the trial discussed above.

51. The trial being considered worth continuing it will be repeated next year.

52. **EXPERIMENT STATIONS AND WORK OF DISTRICT FIELD OFFICERS**—The reports submitted by the district officers are included in full it being considered desirable not to issue them separately with only a brief resume of their work in this report. They are to be found under Section V. of this report.

53. The Agricultural Officer served on a Committee appointed to investigate and report on the possibilities of Land Settlement in the Colony.

SECTION III.

EXPENDITURE AND REVENUE.

Expenditure.

1. Personal Emoluments	\$9,922.32	\$9,922.32
<i>Other Charges.</i>		
2. Transport and Travelling	1,766.55	
3. Books and Periodicals	73.37	
4. Herbarium and Museum .....	.....	
5. Laboratory Equipment	57.14	
6. Samples and Exhibits	16.69	
7. Rental of Office	300.00	
8. Incidentals	45.26	
9. Special Expenditure	918.18	
10. Typewriter	115.00	
11. Meteorological Instruments	152.31	
12. Inspection of Export Fruit	4.75	
13. Bicycle Allowance	18.00	\$3,467.25

Stann Creek Agricultural Station.

B 1 - 11.	\$5,071.29
----------------	------------

Rice Experiment Station, Punta Gorda.

C 1 - 3.	\$1,667.04
---------------	------------

Agricultural Station, Corozal.

D. 1. \$2,527.38

Pest Control.

Purchase of Insecticides \$93.10
 Carried Forward \$22,748.38
 Brought Forward \$22,748.38

Allocations from Hurricane Reconstruction Loan (1934)

a. Livestock Improvement \$498.58
 b. Soil Survey \$1,252.50
 c. Citrus Nurseries 3,372.18
 d. Manufacture of Cassava Products 73.86
 e. Plant Improvement and Importation 63.70
 f. Produce Purchase and Handling Bd. of Agriculture 1,798.86
 g. Meteorological Instruments 1.27
 h. Punta Gorda Rice Station 520.00
 i. Punta Gorda Rice Mill and Drying Kiln (approx.) 17,640.00 25,220.95

Colonial Development Fund.

a. Belize Drying Kiln 5,987.52
 b. Corozal Agricultural Station (approx.) 9,361.73

Rice Milling.

Purchase of Padi, Wages and Milling Costs 9,880.84
 Grand Total Expenditure \$73,199.42

Revenue.

1. Sale of Produce, Agricultural Stations \$471.83
 2. Sale of Insecticides 83.89
 3. Sale of Citrus Plants 1,840.50
 4. Sale of Rice 4,550.21
 5. Sale of Produce, Board of Agriculture 336.15
 6. Fees—Apprentices 15.00 \$7,297.58

SECTION IV.

LEGISLATION:

New legislation enacted during the year consisted of the following:

S.R.&O. 1935, No. 39. Prohibiting the importation of Sugar Cane and all parts of the Sugar Cane plant, except under licence.

Ordinance No. 27, 1935. An Ordinance to facilitate the Destruction of Wee-Wee Ant Nests.

(This Ordinance supercedes the Wee-Wee Ant Ordinance, Chapter 74 of the Consolidated Laws, 1924).

In conclusion I wish to express my appreciation of the loyal services rendered by all members of the Department during the year.

H. P. SMART,

SECTION V. (A).

REPORT ON THE AGRICULTURAL STATION AND DISTRICT STANN CREEK, FOR THE YEAR 1935.

I.

THE DISTRICT.

During the past year agriculture has made steady progress in this District, there having been an increase in the number of crops tried and an increase in quantity of the main crops grown.

BANANAS.

2. The area under Bananas has been extended and in spite of Panama Disease the output has kept on a level with the last few years. It was expected that it would have gone up but the long dry spell experienced from January to July retarded growth and most of the bunches produced were of poor quality. The following are the amounts shipped during the last three years from the Valley:—

	S T E M S		
	1933	1934	1935
January		6,593	11,121
February		7,370	11,598
March		4,667	8,800
April		7,090	9,845
May		9,659	13,273
June		12,870	11,825
July		13,160	12,784
August		14,028	12,186
September		12,567	10,845
October		13,373	12,581
November		13,699	8,037
December		10,676	9,119
Totals	57,374	125,752	132,014

3. Another 12,000 stems were shipped from the other parts of the District, bringing the total for the District up to 144,014 stems of bananas for 1935.

4. The planting of varieties immune to Panama Disease has gone ahead and a market has been found for these bananas through the owners of locally registered small craft, who take them to New Orleans, Tampa and Miami.

CITRUS.

5. More citrus, especially grapefruit, have been planted, the areas under citrus now being:—

	Bearing	Non-bearing	Total
Grapefruit	243 Acres	615 Acres	858 Acres
Oranges	12 Acres	52 Acres	64 Acres
Miscellaneous Citrus	5 Acres	38 Acres	43 Acres
Totals	260 Acres	705 Acres	965 Acres

6. About seventy per cent of the Grapefruit are Marsh's Seedless, the rest being mostly Duncan and Native Seedlings and eighty per cent of the Oranges are Valencias. The 'Miscellaneous Citrus' are made up principally of King Mandarins and Genoa Lemons.

7. The Citrus crop for the season 1935-36 shows an increase on the previous seasons, but the crop is a late one and the majority of the fruit will not be reaped until February to May, 1936.

8. The chief reason for this late crop is the long drought experienced during the greater part of the year; many of the trees flowered three or four times between April and July, dropping practically all their flowers on each occasion prior to the start of the rains in July.

9. The following is a statement of the fruit exported through the British Honduras Citrus Association for the last two seasons and for the first months of the 1935-36 season:

	C A S E S		
	1933-34	1934-35	1935-36 Sep.-Dec.
Grapefruit	14,357½	16,128	11,980½
Mandarins and Tangerines	396	41	134½
Oranges	674½	846	765
Limes and Lemons	11	9	16
Totals	15,439	17,024	12,896

10. During the season 1933-34 approximately 1,500 crates of Grapefruit were canned and juiced and 200 crates sold locally, bringing the season's production up to 17,139 crates, and during the season 1934-35, 996 crates were juiced or canned and 1,750 crates sold locally, bringing the season's total production up to 19,770 crates.

11. It is estimated that the 1935-36 season crops will eventually reach 28,000 cases, made up as follows:—Grapefruit, 26,000; Oranges, 1,500 and Other Citrus, 500 crates.

12. An extension to house a new canning plant has been added to the British Honduras Citrus Association's packing shed and it is intended to go in for canning grapefruit on a larger scale.

13. A borax tank has been installed and the fruit are treated as soon as they reach the shed from the field prior to colouring. This has resulted in a marked decrease in wastage in transit from 'mould' and 'stem end' rot.

14. The grading, sizing and appearance of the pack has improved, but the quality of the fruit is a little lower than in previous years on account of the number of new groves just coming into bearing.

15. The prices obtained for the fruit during the 1934-35 season were satisfactory, the growers getting an average of seventy-five cents per case.

16. So far the prices obtained for the first part of the 1935-36 season have varied a great deal. The first shipments made in September and October, 1935, made over an average of \$2.00 per box to the grower, but the later shipments have only just been paying expenses. It is expected that the price will improve again at the end of the season when the larger amount of the fruit will be ready for shipping.

17. The citrus industry has not been troubled seriously by any pests or diseases, but the appearance of the fruit has been greatly spoilt on most of the orchards by Rust Mite, Melanose and Scale. Dusting with sulphur has been practiced on one orchard with very satisfactory results in checking Rust Mite and most of the other growers are now dusting as well. Spraying with Arbolina has proved satisfactory in controlling the Scale and Burgundy Mixture for Melanose and Scab. It is expected that there will be a distinct increase in the amount of spraying and dusting done next year as the prices obtained for first class looking fruit have been considerably higher than for discoloured fruit.

18. There has been a marked increase in the amount of fertilizers used. Many of the orchards showing a distinct improvement following these applications. The most

popular fertilizer and the one which has given the best results especially with young trees is Nicifos II (17.9% N 17.9% P2O5) applied at a rate of one pound per yearly age of tree per year; that is a three year old tree will receive three pounds of fertilizer usually applied in two applications.

MINOR CROPS.

19. The Minor crops of the District have remained at about the same level, with a slight increase in the production of corn and beans and the area under cassava has been extended slightly.

20. There is still hope in the District that a Cassava Products Factory will be erected in the Valley. There is no doubt that such a venture properly run would be a success and it would be the means of giving the small holders a suitable and remunerative crop to grow. There is approximately 2,000 acres under Cassava in the Stann Creek Valley.

21. The buying by the Board of Agriculture of corn, rice and beans through the Department of Agriculture at the Agricultural Station has had a marked effect in increasing the production of corn and it is expected that the effect of this will be much greater in the future.

STOCK.

22. There has also been an increase in the number of persons going in for stock-raising, especially cattle, and the whole of the local demand for beef is supplied from locally raised animals and there has been a slight increase in the amount of fresh milk used.

23. Cattle suffered locally during the drought on many farms, some of the farmers losing some of their stock through a lack of suitable food and water; but where this happened, the pastures were grossly overstocked. No serious diseases were seen or reported.

II.

THE AGRICULTURAL SETTLEMENT, 19 AND 20 MILES,

STANN CREEK RAILWAY.

24. This Settlement was started in 1932, with the idea of relieving unemployment in Belize. Sixty-two plots of eight acres were laid out and occupied mostly by Belize Creoles. They were helped in the following manner: (i) four acres of the land were cleared; (ii) a bush house was built on each plot; (iii) they were given supplies of planting material and tools, and (iv) they received two months' rations and numerous other aids, including work on roads, cutting sleepers for the Railway, digging drains, etc.

25. The Settlement has not been an entire success, chiefly because (i) the original settlers were not agriculturally minded, and (ii) because of the considerable amount of assistance the settlers received they assumed the attitude that it was only necessary to petition and further assistance would be forthcoming.

26. Of the sixty-two plots, twenty-four are occupied by the original settlers, eighteen have changed hands once, eight, three times and one plot four times. One plot is now used as a school plot, eleven being vacant.

27. The occupiers of the plots at present are made up of the following:—

British Honduras Creoles	20	
Jamaicans	21	
Other West Indians	4	
Others	6	51

28. Of these fifty-one, only ten look like making a real success and another twelve are still hopeful, but only ten out of the fifty-one are keeping up with the payments of their debts to the Government. Of the ten best only two are British Honduras Creoles, five being Jamaicans, two Europeans and an East Indian.

III.

THE AGRICULTURAL STATION, STANN CREEK.

29. The work at the Agricultural Station has gone on very much the same way as during the previous years, weeding, hoeing, macheting, watering, destruction of nests of Wee-Wee Ants (*Atta cephalotes*), cleaning drains and repairing roads and bridges having been regularly carried out and some new drains dug.

30. The area now under cultivation is 110 acres, made up as follows:—

1. Pasture	12 Acres
2. Citrus Groves	20 "
3. Bananas	12 "
4. Cane	2 "
5. Cassava	8 "
6. Cocoa	1 "
7. Tung Oil	1 "
8. Coffee	4 "
9. Mangoes	1 "
10. Citrus Nurseries	8 "
11. General Nurseries	4 "
12. Corn, Beans, Rice, etc	3 "
13. Miscellaneous Fruit Trees	3 "
14. Miscellaneous Economic Trees	3 "
15. Fodder and Mulch Grasses	4 "
16. Roads and Drains	10 "
17. House Plots and Garden	5 "
18. Under Fallow	7 "

METEOROLOGY (1935).

Month	Relative Humidity			Rainfall (Inches)	Shade Temperatures	
	Average Monthly Mean %	Highest %	Lowest %		Mean Daily Maximum °F	Mean Daily Minimum °F
January	77	100	52	4.15	83	63
February	72	99	28	1.19	82	63
March	74	96	55	.75	85	67
April	70	91	45	.34	90	71
May	81	96	54	1.40	98	67
June	70	100	45	2.50	92	75
July	76	99	49	7.28	90	73
August	88	100	50	10.46	88	72
September	79	99	57	10.91	90	67
October	89	99	69	22.01	86	71
November	94	99	65	2.34	86	67
December	87	99	67	6.49	82	64
Totals	—	—	—	69.82	—	—
Average	80	98	53	—	88	69

PLANT INTRODUCTION.

31. The following plants and seeds have been introduced and planted at the Station during the year:—

- (1) From Trinidad—Breadnut (*Artocarpus incisa*) 'seeded', Topee Tambu (*Calathea Allouya*), Giant Governor Banana and Corn.
- (2) From Jamaica—Buds of the Davis Seedless Grapefruit and plants of Ugli Fruit.
- (3) From U.S.A.—Roses, Avocado Pears and Citrus varieties.
- (4) From Spanish Honduras—Seed of Alurites Montana and Aleurites Trisperma.
- (5) From British Guiana—Corn seed.
- (6) From Italy—Corn seed.

CROPS UNDER TRIAL.

32. BANANAS—The Banana Trials mentioned in the last report are still being carried on and are giving satisfaction. The 4-acre Trial laid out in November, 1933, has been further drained and has started cropping.

The costs to date are:—

1934	\$131.31
1935 Drains	35.75
Cleaning and weeding	20.18
Pruning	4.20
Replanting	2.70
Forking and fertilizing	7.60
Cost of fertilizers	10.90
Panama Disease Control	31.95
Reaping	12.32
Total costs to date	\$256.91
Revenue	157.11
Difference	\$99.80

It should be pointed out that the severe drought experienced during 1935 ruined the first crop and only about twenty-five per cent of the bunches reaped were fit for export.

33. A further plot containing Lacatan and Cavendish Bananas has been planted. It is hoped that these varieties which are immune or, at least, resistant to Panama Disease will prove of value as a substitute for the Gros Michel in the Valley.

34. RICE—This crop was again unsuccessful, chiefly on account of the very dry weather experienced. It is proposed to try irrigation next year.

35. CITRUS. (A)—The varietal trials laid out in 1932-33-34 are coming along well. The grapefruit planted in 1932 and 1933 and the oranges and lemons planted in 1933 have started to fruit. Trial shipments of the following varieties were made to Canada:—Genoa Lemons, Villa Franca Lemons, King Mandarins. These were favourably reported on, especially the Genoa Lemons.

(B) Some stock trials were started with—

(a) Marsh Grapefruit budded on the following stocks: Sour Orange, Rough Lemon, a Local Lemon and Native Grapefruit.

(b) Genoa, Villa Franca and Meyers Lemons budded on Sour Orange, Local Lemon and Native Grapefruit.

(c) King Mandarin budded on Sour Orange, Local Tangerine and Native Grapefruit.

(C) A Citrus Manurial and Cultural Trial plot has been laid out and planted with Marsh Grapefruit budded on Sour Orange, the following being the treatments on trial:—

(a) Usual orchard practice as carried out in British Honduras—macheting grass and succulent bush growth at fairly regular intervals—about three times a year, coupled with mulching the tree mounds with a portion of the macheted material. (Control plots.)

(b) As in treatment (A) plus Nicifos II (17.9% N 17.9% P205) at the rate of 1 lb. per year of tree growth.

(c) As in treatment (a) plus slaked lime at the rate of ten to twelve pounds per tree per year.

(d) As in treatment (a) and (b) plus Potash in the form of Muriate of Potash (50.4% K₂O) at the rate of 1 lb. per year of tree growth.

(e) Cover crops of *Tephrosia Candida* and *Canavalia ensiformis* with macheting and hoeing until Cover Crop established plus super phosphate 1 lb. per year of tree growth.

(f) Cover Crop of *Tephrosia Candida* and *Canavalia ensiformis* with macheting and hoeing until Cover Crop established and no fertilizer.

It is felt that the information to be got from the above trials will be of great interest and help to the planters in the District.

(D) Trials, in order to get early and late fruiting, are also being carried out. It has been found that by varying the fertilizers, times of application and methods of cultivation, a slight difference in the fruiting season is obtainable.

36. TUNG OIL—The *Aleurites Fordii* are still disappointing but the *Aleurites montana* continue to do well. These are now 3½ years old. All the trees of *Aleurites montana* flowered this year and six produced fruit. It is intended to increase the area under this crop.

37. CRIOLLO CACAO—This plot of Criollo Cacao is coming on slowly. The long drought hit the trees badly and a good many supplies had to be made. They have been interplanted with plantains and *Erythrina umbrosa* to provide temporary and permanent shade.

38. CASSAVA—The cassava trials are being continued. Some of the plots have been reaped and are being replanted. The following are some of the yields obtained:—

Varieties	Tons per Acre			Average Tons per acre
	1933	1934	1935	
French No. 3	27	8	9	14- $\frac{2}{8}$
New Green	30	18	6	18
Blue Beef	16	9	10	11- $\frac{2}{8}$
White Stick	11	10	10	10- $\frac{1}{8}$
Yellow Stick (Imported)	20	4	7½	10- $\frac{1}{8}$
Sweet No. 6	12	9	4	8- $\frac{1}{8}$
P.G. 1	—	8	—	—
P.G. 2	—	8	—	—
P.G. 2	—	8	—	—
Yellow Stick (Local)	—	7½	11	9-½

The 1933 Trials were on a very small scale and the extra care they got no doubt accounts for the high yields. Draining also plays a very large part in the yields, there being a large increase on well drained land over badly drained land and the number of drains in the Cassava Trial plots is being increased.

A small Cassava Mill and Shed has been erected at the Agricultural Station to deal with the roots grown here. It has a capacity of about five tons of roots per day. The quality of starch produced has been very satisfactory.

39. COFFEE—Two plots of coffee have been planted out, one containing Liberian coffee from seed obtained locally, the other containing Arabian, Liberian and Robusta coffee from seed obtained from Porto Rico. All are doing well, the Liberian having a crop on at present.

40. BEANS—Trials with Red Kidney Beans show that this is a profitable crop to grow with proper cultivation. One plot which had been ploughed and harrowed and the beans sown broadcast gave a return of over 1,000 pounds per acre. Further trials are being carried out.

41. CORN—The 'Ear to Row Selection' Trials were continued. The results were not so satisfactory as those of the previous year, principally on account of the unsuitable weather experienced at the beginning of the season.

COVER CROPS.

42. The Cover Crops tried out at the Agricultural Station have proved successful and the following are recommended for use in the Stann Creek Valley:—

(i) Tall-Growing: *Tephrosia candida*, *Crotalaria Anageroides* *Crotalaria Striata*, *Cajanus indicus* (Pigeon Pea).

(ii) Low Growing: Horse Beans (*Canavalia ensiformis*), Bengal Beans (*Mucana utilis*, *Calapogonium Mucanoides*, *Indigofera endecaphylla*.

Tephrosia candida has been particularly successful amongst Citrus, when cut back at the right stage, i.e.—just when it is flowering. It will keep on growing for three and four years, forming a good heavy growth, keeping weeds down and giving a plentiful supply of mulching material.

NURSERIES (GENERAL)

43. The propagation of fruit trees, economic plants and ornamentals was continued and there has been an increased and encouraging demand for such plants.

NURSERIES (CITRUS)

44. The Citrus Nurseries started the previous year were continued and increased in size. The demand for Marsh Grapefruit was lower than was originally estimated and there are 10,000 good plants on hand. These, however, should be easily disposed of next wet season. There was an unexpectedly large demand for King Mandarins, Valencia Oranges and Genoa Lemons which it was not possible to supply fully. Propagation of these varieties is proceeding rapidly so that it will be possible to supply all that may be wanted in 1936. At present there are about 2,000 King Mandarins, 1,000 Valencia Oranges and 2,000 Genoa Lemons budded and 5,000 stocks which will be fit for budding shortly.

45. PLANT MATERIAL AND SEEDS DISTRIBUTED.

Name	Previous	1935	Total
Avocado, trees No.	3	—	3
Badu, suckers, No.	200	—	200
Banana, suckers, No.	2,475	253	2,728
Beans, Horse—Seed lbs.	—	10	10
Breadfruit, trees No.	16	1	17
Cassava, cuttings, No.	4,450	800	5,250
Corn, Seed, Qrts.	—	125	125
Corn, Seed, lbs.	—	83	83
Citrus, No.			
Grapefruit	1,369	5,911	7,280
Oranges	66	2,285	2,351
Tangerines	47	25	72
Limes	75	25	100
Lemons	17	255	272
Sour Orange Stocks	350	—	350
Sour Orange Seedlings	790	25	815
Other Citrus	28	827	855
Coco, tubers, No.	400	24	424
Coffee, Seedlings, No.	2,658	1,100	3,758
Cowpeas, seeds, lbs.	8	—	8
Cover & Green Manure Crops, Seeds, lbs.	75 $\frac{1}{4}$	72 $\frac{1}{2}$	147 $\frac{3}{4}$
Dasheen, tubers, No.	150	—	150
Grasses, Cuttings	2,400	2,800	5,200
Mango, trees, No.	37	1	38
Ornament Plants & Shade Trees, cuttings	808	323	1,131
Guango Trees, No.	46	—	46
Erythrinus, No.	250	—	250
Erythrinus, seeds, lbs.	—	1	1
Papaw, Seeds, ozs.	2	—	2
Pigeon Peas, Seeds, lbs.	14 $\frac{3}{4}$	—	14 $\frac{3}{4}$
Pineapple, slips, No.	143	300	443
Rice, seed, lbs. British Guiana	394	328	722
Rice, seed, lbs. British Honduras	116	524	640
Sugar Cane, cuttings, No.	1,938	30,895	32,833
Sweet Potatoes, cuttings, No.—			
Trinidad Variety	5,500	133	5,633
Tower Hill	3,300	132	3,432
Local	—	155	155
Tobacco, Seedlings, No.	1,550	—	1,550
Tobacco, Seeds, ozs.	— $\frac{1}{2}$	—	— $\frac{1}{2}$
Yam, tubers, No.	622	357	979
Economic Trees, No.	418	22	440
Economic Trees, Seed., lbs.	—	— $\frac{1}{4}$	— $\frac{1}{4}$
Vegetable Plants	1	—	1

PRODUCE SOLD DURING THE YEAR 1935

46. The sum of \$395.02 was collected at the Agricultural Station for produce sold during the year 1935.

EXTENSION WORK.

47. The Assistant Agricultural Officer, whilst acting as Agricultural Officer, visited most of the Districts in the Colony including Belize, plantations up the Belize River and the Sibun River, Punta Gorda and the Toledo District, Corozal and the Corozal District and Orange Walk and District.

LIVESTOCK.

48. The Cattle at the Agricultural Station continue to do good work and it is proposed to get some young steers for breaking in. A few planters in the Valley are becoming interested in cattle as draught animals and have asked the Department to break in some animals for them.

49. The pigs have not had a bad year. A lung-worm caused a lot of trouble in the young stock, so much so that all breeding was suspended. It is intended to start afresh next year on new lands.

50. The mule and horse have given no trouble and are working well.

(Sgd.) R. A. KITCHING,
Assistant Agricultural Officer,
Stann Creek District.

22nd January, 1936.

SECTION V. (B).

REPORT ON RICE STATION AND DISTRICT PUNTA GORDA, FOR THE YEAR 1935.

STAFF AND BUILDINGS.

1. Mr. E. L. Reneau acted Local Assistant from 1st March to 30th April. Mr. Maxwell Powell from 1st June to 12th November.
2. Mr. Antonio Gentle was appointed foreman as from 16th June.
3. The need for capable assistance in the office and the field was keenly felt especially as district work called for more of my time and attention.
4. The importance of a small local Library of suitable works of reference cannot be over estimated.
5. The residence of the Officer-in-Charge was extended but there is still urgent need for a suitable storeroom, a concrete drying floor, a telephone, better bridges and a better office.

METEOROLOGY.

6. Rain fell on 245 days during the year. The total precipitation was 146.48 inches. June was the wettest month with a total rainfall of 32.40 inches when it rained every day in the month.
7. The wettest day, however, was the 26th October with a rainfall of 7.15 inches accompanied by a storm which did some damage to cultivations.
8. The mean shade temperature as recorded by the dry bulb thermometer was 87.03° F. The highest temperature was 98° F. recorded on 21st May and the lowest was 46° F. on the night of the 28th January.

TABLE I. SHADE TEMPERATURE (FAHR.) AND RAINFALL (INCHES).

Month.	Mean Daily Maximum	Mean Daily Minimum	Highest Maximum	Lowest Minimum	Lowest Maximum	Highest Minimum	Rainfall	Greatest Fall Amount	Greatest Fall Date	No. Rain Days
January	81.30	63.1	86	46	71	73	5.24	1.93	2nd	20
February	82.90	62.6	93	51	71	81	1.74	.36	26th	11
March	86.77	66.61	96	59	73	74	4.68	1.64	9th	20
April	90.8	68.3	94	63	81	75	.49	.23	14th	6
May	92.2	71.6	98	68	89	75	4.68	1.20	10th	13
June	89.1	73.3	92	70	75	87	32.40	5.60	19th	30
July	89.	74.	95	69	80	91	29.55	4.58	10th	27
August	89.7	71.5	94	52	80	79	19.84	5.88	1st	29
September	89.9	72.0	93	63	86	77	14.25	2.30	13th	24
October	87.6	78.7	91	67	79	75	20.04	7.15	26th	26
November	81.5	66.7	90	62	79	78	6.75	1.20	10th	19
December	83.6	65.6	92	58	77	72	4.82	.90	8th	20
Annual Mean	87.03	69.5					146.48			245

9. The following table shows the monthly rainfall and temperature recorded during the year.

PADI GROWN.

10. Twenty-four varieties including four types, selected during last season from the padi grown locally were tried out. "Dibbling" as practised by the local planter i.e. sowing seeds in holes made with a sharp-pointed stick in unploughed lands; sowing broadcast, and transplanting under dry (unirrigated), and wet (partly irrigated) conditions were the methods adopted.

11. Owing to the late rains and the difficulty experienced in obtaining the necessary labour when required for cultivation, a part of the crop had to be abandoned and the results of the Variety Trials undertaken cannot be regarded as conclusive. The June rains accompanied by heavy storms destroyed seedlings and in consequence transplanting was not completed before the 18th of July. Seedlings were in many instances very small when put out. Fear of damage by October rains, however, compelled early action. This was fully justified at the time of reaping when some damage was done to the crop by rains. A mechanical thresher will greatly help in this respect. It would seem, however, that planting later than June is somewhat risky and ought to be avoided.

12. The accompanying Table II gives the total yields of padi obtained, apart from Progeny Row selections.

TABLE II.

Shied (1)		Dibbled lbs.	Transplanted		Total Padi, lbs.
Variety	lbs.		Wet, lbs.	Dry, lbs.	
No. 29	—	124	12	90	226
Upland	—	103	8½	40	151½
Demerara Creole ..	946	762	10	904	2,622
No. 75	—	—	3	—	3
No. 78	—	—	2	—	2
No. 79	1,848	323	11	844	3,026
H 6.	—	—	4	—	4
H 7.	1,264	500	15	742	2,521
Ramcajara	—	68	7	193	268
Kalyaman	33	34	7	64	148
Blue Stick	—	59	8	227	294
McKenzie Small ..	—	—	5	—	5
McKenzie Large ..	—	—	10	—	10
Lead	—	—	3	—	3
Akkulu	—	—	2½	—	2¾
D 114	—	—	1¾	—	1¾
Kristna Kala Kulu ..	—	—	2	—	2
American	—	7	—	—	7
B. H. Creole	488	150	4½	118	760½
Total	4,579	2,130	106½	3,222	10,047¼

(1) Broadcast.

VARIETIES.

13. The six varieties from British Guiana—Demerara Creole H7; No. 79; Ramcajara; Kalyaman and Blue Stick and the two Trinidad types from the Imperial College of Tropical Agriculture, all of which were grown last year on the Station, were reaped along with the following varieties also received from British Guiana—Nos. 75 and 78; H6; Garika Suama Vari; Carolina Lead; Kristna Kala Kulu; A16.34; D114; McKenzie Small; McKenzie Large; Akkulu; Variants I; II; III and IV selected locally and a Carolina type of grain known locally as the 'American'. Most of these were tried out during the fall of 1934 but abandoned through damage done by birds.

14. Of the new varieties D114; Nos. 75 and 78; Akkulu and H6 seem promising. It is hoped from these to get a type suitable to local conditions with a higher yield and a stronger stalk yet more easily threshed than the Local Creole whose 'head' when ripe readily snaps off.

15. Three acres were sown broadcast; 1¼ acres dibbled and about an acre transplanted.

VARIETY TRIALS PLOTS.

16. The following nine varieties—B. H. Creole, No. 29. (I.C.T.A.), Upland (I.C.T.-A.), No. 79. Kalyaman, Ramcajara, Demerara Creole, Blue Stick and H7. were tested out for yields in randomised plots, 1/360 of an acre each. Each plot was surrounded by strips to avoid border effects.

17. Each variety was repeated nine times. Two trials were undertaken one dibbled and the other transplanted under unirrigated conditions.

18. The rainfall was adequate for good yields but for reasons already mentioned these results may not be regarded as conclusive. The trials will be repeated next year when it is hoped better conditions will prevail.

Table IV gives the results obtained.

The results show D.C., H7 and No. 79 the best when transplanted and D.C., Nos. 29 and 79 when dibbled.

PURE LINE. SELECTION WORK.

19. Twenty-four varieties were grown under observation in rows of single plants. Selections of the three best of each variety were made for further trials.

BANANAS.

20. Three more acres of Gros Michel were planted out for further trials. Two small plots of Lacatan and Chinese are also under observation. Reaping of the old patch began in August. Eighty stems were reaped and sold for \$16.07. (20 stems were sold to the Live-stock division for feed at the flat rate of 10 cents per bunch at which rejects were bought from outside sources.)

21. Present indications fully support Professor Hardy's findings in his recent report on the soil of the district in which he expresses some doubt as to the advisability of extending cultivations of bananas in these highly acid soils.

MISCELLANEOUS CROPS.

22. LEGUMES—Red Kidney Beans, Black Eye and Cow Pea (spp) are under trials to determine the optimum planting season. Mung and Lima Beans were also grown.

GREEN MANURE AND COVER CROPS.

23. *Stizolobium alterinum*, *Tephrosia Candida*, *T. Volgelu*, *Crotalaria Striata*, and *C. Anagyroides* are under trial.

VEGETABLES AND FRUITS.

24. The following varieties of tomatoes were tried out—Wood's Break O'Day; Livingston Globe and Brimmer. 'Livingston Globe'—the best bearer—proved most susceptible to Blossom End Rot. Guatemala Grass (*Tripsacum laxum*) is being grown for fodder and as a soil binder on the edge of the main creek. Yams and Pineapples were also tried out.

SEED DISTRIBUTION.

25. Small quantities of Tomato Seedlings, Yams, Legumes (including Mung, *Crotalaria* and Bengal Beans) were distributed free to several planters.

Tomato Seedlings	500 plants
Mung Bean	13 ounces
Yam	2 pounds
Sunflower	1 pound
Guatemala Grass	50 cuttings
Cow Pea	2 pounds
Lima Beans	$\frac{1}{4}$ pound

About 1,600 pounds of seed padi were loaned to rice growers, and 1,000 pounds sold to Tela, Honduras.

TABLE IV.—VARIETY TRIALS.

Variety.		Origin	Grain Type	Dibbled lbs. per acre	lbs. per acre Transplanted (DRY)	Remarks
Demerara Creole	.. ..	British Guiana	Seta, Patna Long, thin.	1920	2,110	Very promising.
H. 7 ..	.. ..	British Guiana	"	1,667	2,187	Very promising
No. 79 ..	.. ..	British Guiana	Medium	1,800	1,880	Very promising
Upland ..	.. ..	Trinidad	Medium	1,016	1,440	Fair
B. H. Creole	.. ..	Toledo	Medium	1,620	1,040	Weak Head
Blue Stick	.. ..	British Guiana	Medium	986	1,060	
Kalyaman	.. ..	Trinidad B.G.	Long, thin	1,209	1,418	Promising
Ramcajara	.. ..	B.G.	Medium	1,611	1,386	Promising
No. 29 ..	.. ..	Trinidad	Medium	1,860	1,660	Promising

VISITS.

26. H. E. The Governor visited the Station on 3rd April and the Hon. The Colonial Secretary on 22nd July.

DISTRICT WORK.

27. Bananas continue to be the leading crop grown, 58,364 stems of a cash value of \$18,273 were supplied by the Punta Gorda area.

The Monkey River Section shipped 71,960 stems yielding \$16,912 (figures for the December quarter not included). There are many who still need to learn how to cultivate and reap the fruit yet the results on the whole have been encouraging. There is a marked tendency of abandoning cultivations too early and seeking new lands however far removed, thus making transportation a difficult and expensive factor rather than exerting some energy in cultivating the old plantations. However, it is to be hoped that the recent decision of Government by which ownership of Crown lands can be had on somewhat easier terms should serve to establish a peasant proprietary so essential to progress in sound agricultural practices. There has been some attempt to improve holdings by drainage and tillage.

28. Rice comes next in importance but here again there is the old wish for new lands for every crop of rice grown as the belief persists that rice is but a catch crop to bananas, and good yields are only possible on new lands.

29. Demonstrations in the use of light ploughs drawn by cattle are in hand so that the small grower may be encouraged to cultivate and grow this important cereal as a main crop. The use of the grass-knife in reaping and threshing by hand has been introduced.

30. COCONUTS—This crop needs some attention as there is every possibility of a sound industry being developed.

31. SUGAR—The five small sugar mills operated during the year.

32. CORN AND BEANS—The market offered by Government to growers of these crops has resulted in better prices being obtained and an extension of cultivations.

AGRICULTURAL CENSUS.

33. An attempt to collect figures of the acreage under cultivation of these crops has been rendered exceedingly difficult owing to difficulties of transportation and absence of reliable information as regards the many scattered holdings. Large land owners should be made to submit annual returns of cultivation and yields.

PEST AND DISEASES.

34. The Wee-Wee ant (*Atta spp.*) continued to do damage throughout the year. Cyanogas and Carbon bisulphide were used to fight them. Community action is essential if this pest is to be got rid of. The White Stem Borer of Rice (*Scirpophaga albinella Cram*) was present but did no great damage. Froghoppers were again seen but did not do much damage to rice. The Rice Weevil (*Calandra aryzae L.*) caused much loss to stored grains.

35. Panama Disease seems to be spreading. The worst centres seem to be at Monkey River, Sarstoon, and Temash. Here again community action is needed for its control. Thirty-five gallons of crude oil were distributed free towards this end. A species of Leaf Spot closely resembling the Sigatoka Disease of banana in Fiji has been met with. Reduction in the number of leaves, peculiar mottling of young leaves, partial rotting of apex of stem followed in many cases by premature ripening of the fruit thus giving a too full appearance to the bunch are the symptoms observed.

TOURS AND INSTRUCTION.

36. Visits were paid to Monkey River, Deep River, the Rio Grande, the Moho, Barranco, Temash and Sarstoon. Instructions given included: "Hints on the growing of crops"; "The preparation and handling of goods for Market"; "Drainage, its practice and uses"; "The control of Pests and Diseases", etc. Three articles, "Rice in the Caribbean"; "Corn, its uses and cultivation"; and "The work of the Rice Experimental Station" were written for the Journal of the British Honduras Agricultural Society.

RICE MILLING.

37. An up-to-date milling plant complete with drying kiln was erected at Punta Gorda and formally opened by H. E. The Governor on May 25th. (It was a gala day for the town). The mill was obtained from Messrs. Lewis C. Grant, Fife, Scotland.

38. 143,278 pounds of padi were bought from the farmers of the District, during the year from the 1934 crop at 1½cents per pound. Of this, 39,200 pounds were milled by the new mill yielding 81 bags (of 224 pounds each) of rice and 22 bags of bran were obtained.

LIVESTOCK.

39. The development of a Cattle industry should result in a reduction in the importation of milk and provide a supply of draught animals for ploughing Rice and Cane lands. A Duroc Jersey boar has been stationed in the District since March. It is a matter of regret that though his services were free, only two stock owners utilized him during the year in spite of the fact that there is a brisk trade in pigs throughout the year.

(Sgd.) DANL. D. HAYNES,
Agricultural Instructor.

APPENDIX A.

Imperial Institute,
London, S. W. 7.
5 October, 1935.

Sir,

With further reference to your letter No. A.O. 39-35 (1) of the 17th July, I now enclose for your information a copy of a report which has been despatched to His Excellency the Governor on the two samples of ginger from the Monkey River area which you forwarded for examination.

Should it be decided to carry out further trials in the preparation of either peeled or unpeeled ginger, the Imperial Institute will be glad to receive samples of the resulting products for examination and valuation.

I am, Sir,
Your obedient servant,
(Sgd.) H. A. F. Lindsay,
Director.

The Agricultural Officer,
Post Box 149,
Belize, British Honduras.

Imperial Institute,
London, S. W. 7.

REPORT ON GINGER FROM BRITISH HONDURAS.

The samples of ginger which are the subject of this report were forwarded to the Imperial Institute by the Agricultural Officer and are referred to in his letter No. A.O. 39-35 (1) of the 17th of July, 1935.

The samples represented unpeeled and peeled ginger rhizomes received from the Monkey River area of the Colony, and it was desired to ascertain their quality and commercial value.

DESCRIPTION.

No. 1. This sample weighed 14 oz. and consisted of very plump, well washed hands of unpeeled ginger, pale brown externally. The hands, which measured up to $6\frac{1}{4}$ inches in length, were very moist internally, but were free from mould.

No. 2. This sample weighed 12 oz. and consisted of hands, up to 4 inches in length, of well peeled ginger of pale buff color. Some of the hands were plump, but most of them were rather thin. On the whole the ginger was rather hard. The fracture was short, and in general only slightly fibrous. Internally the ginger was very pale straw-yellow. The flavour, aroma and pungency were good.

RESULTS OF EXAMINATION.

The peeled ginger was examined with the following results, which are shown in comparison with the corresponding figures for a sample of commercial Jamaica ginger:—

TABLE.

	Present Sample No. 2	Commerical Jamaica ginger
Moisture	12.6%	8.9%
Matter extracted by acetone:— ex- pressed on ginger as received	6.7%	5.3%
expressed on moisture free ginger	7.7%	5.8%

The present ginger was found to be free from sulphur dioxide. It yielded on steam distillation 1.9 per cent of essential oil.

These results show that the peeled ginger gave a fairly satisfactory yield of extract, the amount being higher than that furnished by the commercial Jamaica ginger used for comparison. The yield was however considerably lower than that obtained from East Indian ginger cuttings, which are largely employed for the preparation of extract and furnish from 9 to 9.5 per cent.

The extract from the present sample was of fairly good aroma and pungency.

The yield of essential oil from the sample may be regarded as normal, the usual amount being from 2 to 3 per cent, although lower figures are occasionally obtained. The oil was pale straw-yellow in colour and of satisfactory odour.

The absence of sulphur dioxide is satisfactory as showing that the peeled ginger had not been treated with sulphur in the course of preparation.

COMMERCIAL VALUE.

The two samples were submitted to a firm of brokers in London, whose observations on their quality and commercial value may be summarised as follows:—

The unpeeled ginger represented by sample No. 1 would not be saleable in the United Kingdom in its present semi-dry condition. For this market the ginger should be thoroughly dried and when so prepared it would have to compete with Sierra Leone unpeeled ginger, which is now selling in London at 32s-33s per cwt. spot.

The peeled ginger represented by sample No. 2 was considered to be of promising appearance and to possess good pungency, but it was rather lacking in plumpness. It should be saleable in the United Kingdom and its chief use would probably be for distilling and the manufacture of extract. Its value is difficult to assess as it is grown in a country from which supplies have not hitherto been obtained and would thus be a new line for the trade. A conservative price would be about 35s-40s per cwt. spot in London, with Jamaica No. 3 at 55s and Nigerian at 50s per cwt. spot.

REMARKS.

Ginger as represented by the present sample of peeled ginger (No. 2) would be readily saleable on the United Kingdom market. Unpeeled ginger in a partially dried condition as represented by sample No. 1 would not be saleable though a carefully dried product of this type would doubtless find a market.

The sample of peeled ginger is however only of low medium quality. If by improved cultivation a ginger could be produced which would yield on peeling plumper, bolder hands than those of the present sample, a higher price would be obtained, as the product would be able to compete with grades of peeled ginger, such as Jamaica No. 3, which are suitable for other purposes than extract-making. If bolder ginger cannot be produced and the material only succeeds in finding a market for distillation and extract-making, it would probably be more remunerative to ship it in the unpeeled condition, similar to Sample No. 1, but properly dried, thus avoiding the cost of peeling and loss in weight.

It would be desirable to obtain a market report on dried unpeeled ginger as prepared in the Colony. A sample weighing say 3 lb. if sent to the Imperial Institute would be examined and submitted to the trade for report.

5 October, 1935.

RAINFALL—1935—INCHES.

OBSERVATION STATION	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		RAINFALL TOTAL		RAINDAYS	
	1935	Mean	1935	Mean	1935	Mean	1935	Mean	1935	Mean	1935	Mean	1935	Mean	1935	Mean	1935	Mean	1935	Mean	1935	Mean	1935	Mean	1935	Mean (1)	1935	Mean(2)
COROZAL DISTRICT :																												
TOWN	—	2.84	0.02	1.00	1.04	1.13	1.26	1.02	0.28	5.45	2.61	9.70	10.81	5.89	5.99	5.21	4.05	6.64	17.02	7.53	1.43	3.64	2.53	3.67	47.04	53.72(26)	84	99.8(23)
Agricultural Station (3) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.34	—	1.64	—	1.70	—	—	—	—	—
Louisville (4)	0.20	—	0.09	—	3.74	—	0.64	—	0.0	—	3.86	—	9.52	—	9.22	—	3.50	—	21.01	—	1.71	—	1.26	—	54.75	—	87	—
ORANGE WALK DISTRICT :																												
TOWN	0.40	3.73	0.43	1.80	1.29	1.21	0.21	1.42	1.12	5.34	4.05	8.52	11.07	6.03	10.78	6.35	3.20	7.54	14.25	8.03	1.11	3.51	3.27	3.78	51.18	57.26(21)	137	167.6(5)
Freshwater Creek ..)	—	—	—	—	—	—	—	—	—	—	—	—	7.61	—	11.71	—	5.95	—	13.51	—	1.11	—	2.63	—	—	—	—	—
Forest Camp (3)) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
BELIZE DISTRICT :																												
TOWN	3.65	7.54	2.16	2.38	3.20	1.71	1.10	2.19	0.13	6.04	3.20	8.73	5.41	6.62	7.21	6.37	5.09	9.16	24.27	16.97	8.21	9.46	2.28	7.85	65.91	85.02(34)	151	171.2(7)
Bamboo Patch (3)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.07	—	4.75	—	—	—	—	—
EL CAYO DISTRICT :																												
TOWN	2.16	5.81	0.37	1.66	2.44	1.55	1.01	1.55	2.23	4.94	4.13	9.19	7.56	7.11	5.39	6.57	7.15	7.09	12.90	8.10	6.24	8.33	1.89	5.87	53.47	67.27(18)	128	139.80(5)
STANN CREEK DISTRICT :																												
TOWN	4.90	7.16	1.60	2.38	0.17	1.16	0.66	2.46	0.45	4.73	1.75	8.60	3.95	8.28	7.56	7.75	5.10	9.66	21.36	12.74	3.09	9.41	6.41	7.96	57.00	82.29(16)	81	98.25(4)
Agricultural Station ..	4.15	7.28	1.19	1.84	0.75	2.21	0.34	3.73	1.40	10.34	2.50	8.83	7.28	10.67	10.46	9.76	10.91	12.76	22.01	13.19	2.34	4.43	6.49	10.17	69.82	95.21(3)	165	185.5(3)
Industrial School ..	4.05	5.81	1.34	3.08	1.80	2.69	1.00	4.73	2.07	8.59	4.49	12.55	11.47	14.90	10.81	9.28	14.49	15.05	21.73	16.41	3.00	8.38	6.83	7.93	83.08	109.40(8)	168	183.0(5)
Alta Vista-16 Miles (3) ..	3.02	—	0.56	—	2.00	—	2.62	—	1.60	—	5.84	—	15.36	—	12.33	—	17.04	—	27.76	—	2.33	—	7.46	—	—	—	—	—
Middlesex	3.70	8.55	2.40	2.53	3.93	1.78	2.28	4.35	2.68	10.95	11.21	18.02	25.51	20.61	9.69	16.05	11.37	20.33	23.96	17.27	6.37	5.75	5.91	11.36	109.01	137.55(7)	149	166.9(6)
PUNTA GORDA DISTRICT :																												
TOWN	4.41	11.42	1.76	5.59	4.92	3.52	1.21	3.93	4.95	9.81	34.75	25.45	26.13	30.12	17.70	25.31	16.91	23.61	19.63	14.35	8.97	9.69	5.30	10.87	146.64	173.67 (26)	183	160.00(4)
Agricultural Station (4) ..	5.24	—	1.74	—	4.68	—	0.49	—	4.68	—	32.40	—	29.55	—	19.84	—	14.25	—	22.04	—	6.75	—	4.82	—	146.48	—	243	—
Tropical Oil Product Co. (5)	4.10	—	.81	—	2.77	—	.37	—	1.17	—	23.03	—	27.07	—	16.28	—	12.44	—	28.65	—	8.22	—	4.79	—	129.70	—	173	—

(1) RAINFALL TOTAL 'MEAN'.—The number of years taken in calculating the Mean is shown in brackets after the Mean figure.

(2) RAINDAYS 'MEAN'.—In no case has a complete record been kept for the period for which rainfall is available. For this reason the number of years taken in calculating the Mean Raindays is shown in brackets.

(3) Station opened in 1935.

(4) Station opened in 1934.

(5) Records incomplete for years previous to 1935.

